

[What is claimed is:]

1. An audio reproducing apparatus for amplifying an audio signal according to a pulse width modulation signal generated based on a digital audio signal and further filtering it so as to output an analog audio signal, the apparatus comprising:

amplification means comprised of a plurality of switching elements for amplifying the audio signal;

drive means for generating a drive control signal based on the pulse width modulation signal and controlling ON and OFF of the switching elements according to the drive control signal so as to drive the amplification means; and

compensation means for compensating a pulse width of the drive control signal by using a signal according to an offset voltage appeared in the amplification means due to variations in characteristics of the switching elements, and

the compensation means has:

waveform formation means for dulling an edge of a pulse shape of the pulse width modulation signal; and

comparison means for comparing the pulse width modulation signal of which edge is dulled by the waveform formation means to a threshold and outputting a pulse signal having the pulse width according to a comparison result and also rendering the threshold variable by using the signal according to the offset voltage.

2. An audio reproducing method for amplifying an audio signal according to a pulse width modulation signal generated based on a digital audio signal and further filtering it so as to output an analog audio signal,

    dulling an edge of a pulse shape of the pulse width modulation signal;

    comparing the pulse width modulation signal of which edge is dulled to a threshold;

    outputting a pulse signal having a pulse width according to the comparison result;

    detecting or generating a signal according to an offset voltage of amplification means comprised of a plurality of switching elements; and

    rendering the threshold variable by using the signal according to the offset voltage so as to compensate the pulse width of a drive control signal of the amplification means generated based on the pulse width modulation signal.